

REMARKS

I. INTRODUCTION

The undersigned gratefully acknowledges the time taken by Examiner Wollschlager to conduct the telephone interview on May 20, 2008. Claims 4-6, 8-12, 15-16, and 30-32 are pending in the application. By this Amendment, claims 5-6, 8-12, and 30 are amended to more particularly recite the features of the method for extruding a peroxide crosslinked polymer tube. Claims 1-3, 7, 13, 14, and 17-29 were previously canceled without prejudice or disclaimer. New claims 31 and 32 are added. In view of the foregoing amendments and following remarks, the Applicants respectfully submit that the application is in condition for allowance and request a notice stating the same. Reconsideration and withdrawal of the rejections are respectfully requested.

II. INFORMATION DISCLOSURE STATEMENTS

The Final Office Action dated February 13, 2008, includes an initialed copy of the IDS submitted May 10, 2004. Although document no. A6 is now listed as having been considered, two of the cited documents are still indicated as having not been considered, specifically, document nos. A4 (DE 2442230) and A9 (German non-patent literature document by M.Jaecker). The Applicant respectfully requests that these documents be considered for the following reasons.

A full translation of a foreign language document is not required unless such translation is within the possession, custody, or control of, or is readily available to any individual designated in 37 C.F.R. 1.56. See 37 C.F.R. § 1.98(a)(3)(ii). As no such translation was available, pursuant to 37 C.F.R. § 1.98(a)(3)(i), a concise explanation of the relevance, as it is presently understood by the individual designated in 37 C.F.R. § 1.56(c) most knowledgeable about the content of the information, of each patent, publication, or other information listed that is not in the English language, is sufficient. Accordingly, the Applicant notes that a copy of an International Search Report (German Language) dated February 18, 2004 indicating the relevance of at least documents A4 and A9 was submitted with the May 10, 2004 IDS. The International Search Report (ISR) provides the respective degrees of relevance for each reference ("A"). Although the Final Office Action states that "the record does not appear to contain the

English translation of the pertinent portions of the ISR . . .” (page 2), a non-verified English translation of the pertinent portions of the ISR was also submitted on May 10, 2004 (*see page 6 of 9 of the first listed document entitled “NPL Documents” submitted on May 10, 2004*). This is believed to be sufficient for consideration of the documents, particularly in view of the fact that both of documents A4 and A9 were cited as “A” references, i.e., publications defining the general state of the art, but not particularly important. *See* M.P.E.P. § 609.04(a)(III). Therefore, consideration of document nos. A4 and A9 are respectfully requested.

III. CLAIM REJECTIONS UNDER 35 U.S.C. § 112

On pages 2-3 of the Final Office Action, claims 4-6, 8-12, 15, 16, and 30 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement because the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, has possession of the claimed invention. The rejection is respectfully traversed.

First, with regard to the Office’s position that the recitation in claim 30 of “a melting pressure before entry to the extrusion die is approximately 700-1500 bar” lacks support in the original disclosure, the Applicant respectfully disagrees. Original claim 17 and paragraph 0013 of the original disclosure each recite that the “melting pressure before entry to the extrusion die does not exceed approximately 700 to 1500 bar, preferably 1200 bar.” Notwithstanding the fact that such a recitation believed to inherently imply a defined range (approx. 700-1500 bar), the Applicant respectfully submits herewith a verified English language translation of the same passage from the priority document, German Application No. 102 51 152.7, filed October 31, 2002, which was incorporated by reference in the instant application (*see* paragraph 0001). According to the verified English translation, a better translation of this passage is “the melting point pressure prior to entering the extrusion tool is between approximately 700 to 1500 bar and is preferably 1200 bar” (*see* attached verified translation). Therefore, it is believed that the language in claim 30 regarding the melting pressure is supported in the written description. Reconsideration and withdrawal of the rejection are respectfully requested.

Second, the Final Office Action states that claim 30 “now recites that the ‘mixture’ has a melting point and a crosslinking temperature” but that “the specification appears to discuss the melting point and crosslinking temperature relative to the polymer itself and does not appear to provide support for the crosslinking temperature and melting point relative to the ‘mixture’.” Final Office Action, page 3. By this Amendment, claim 30 is amended such that the rejection is believed to be rendered moot. Reconsideration and withdrawal of the rejection are respectfully requested.

Third, the Final Office Action states that “the scope of the term crosslinkable polymer has been broadened by the deletion of the term ‘peroxide.’” Page 3. The Final Office Action concludes that “[t]here does not appear to be support in the original disclosure to employ polymers other than peroxide crosslinkable polymers.” Page 3. The Applicant respectfully disagrees for at least two reasons. First, the polymer itself is not necessarily a “peroxide crosslinkable polymer,” but rather a crosslinkable polymer that may be included in a mixture with, among other things, a crosslinking agent such as, for example, an organic peroxide. The processing of such a mixture according to the claimed method may provide an extruded peroxide crosslinked polymer tube. Second, paragraph 0035 of the original disclosure expressly states that the polymer may be “a polyolefin, e.g., polyethylene HDPE/UHMPE or another crosslinkable polymer.” Reconsideration and withdrawal of the rejection are respectfully requested.

IV. CLAIM REJECTIONS UNDER 35 U.S.C. § 103

A. Claims 4, 5, 8-12, 16, and 30

On pages 4-6 of the Final Office Action, claims 4, 5, 8-12, 16, and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,868,436 to Ootsuji *et al.* (“Ootsuji”) in view of U.S. Patent No. 3,928,525 to Fuwa *et al.* (“Fuwa”) and in view of U.S. Patent No. 3,331,100 to Gould and U.S. Patent No. 5,804,116 to Schmid *et al.* (“Schmid”). The rejection is respectfully traversed.

Claim 30 recites a method comprising, in relevant part, “supplying a mixture to an extruder . . . heating the mixture *in the extruder* . . . controlling the temperature of the mixture *in the extruder* . . . continuously feeding the mixture from the extruder to an extrusion die, wherein

a melting pressure *before entry to the extrusion die* is approximately 700-1500 bar” Thus, claim 30 includes several steps related to the mixture in the extruder and/or conditions within the extruder. In setting forth the rejection, however, the Final Office Action consistently cites portions of Ootsuji related to the “long land portion of the die unit” (*see* column 9, lines 23-26) as well as the “Pressurized Cooling Device” provided at the delivery end of the land portion of the die unit (*see* column 10, lines 17-20). In this regard, the Final Office Action appears to disregard the fact that at least some of the recited steps occur in and/or are related to the extruder.

For example, the Final Office Action states that “Ootsuji et al. teach and suggest that the pressure of the extrusion can be optimized and lessened relative to conventional methods by utilizing a lubricant in the die land portion (col. 10, lines 1-15; col. 10, lines 32-58).” It is respectfully submitted, however, that the recitation of a lubricant in a die land portion fails to teach or suggest, for example, a specific pressure range in the extruder. Additionally, the specific pressures recited in Ootsuji at column 10, lines 32-58 are related to the pressure of the cooling fluid in the cooling device at the end of the die unit and not to a melting pressure in the extruder before entry to the extrusion die. Importantly, although Ootsuji states that “screw extruders are [usually] employed as an extrusion means,” the patent also states that “[i]n this process, a thermoplastic resin mixed with a cross-linking agent is instantaneously compressed *at a high pressure of more than 2000 [atms]*” Column 9, lines 9-16 (emphasis added). A pressure of 2000 atms equates to about 2026 bar. Therefore, Ootsuji does not teach or suggest at least the recited melting pressure before entry to the extrusion die of approximately 700-1500 bar, which pressure reduces the load on the equipment during processing relative to other known processes (*see* paragraph 0013 of the disclosure).

The other cited patent documents, i.e., Fuwa, Gould, and Schmid are not believed to remedy at least the above-noted deficiencies of Ootsuji. Accordingly, claim 30 is believed to be allowable over the proposed combination of Ootsuji, Fuwa, Gould, and Schmid for at least the above-mentioned reasons. Claims 4, 5, 8-12, and 16 depend from claim 30 and are believed to be allowable for at least the same reasons. Reconsideration and withdrawal of the rejections are respectfully requested.

B. Claims 6 and 15

On pages 6-7 of the Final Office Action, claims 6 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ootsuji, Fuwa, Gould, and Schmid, as applied to claims 4, 5, 8-12, 16 and 30, further in view of U.S. Patent No. 3,095,608 to Munsell. The rejection is respectfully traversed. Munsell is not believed to remedy at least the above-noted deficiencies of the proposed combination of Ootsuji, Fuwa, Gould, and Schmid. Claims 6 and 15 depend from claim 30 and are believed to be allowable for at least the same reasons set forth above. Reconsideration and withdrawal of the rejections are respectfully requested.

V. CONCLUSION

All of the stated grounds of rejection are believed to have been properly traversed or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

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Enclosures: Verified translation of relevant paragraph of German Priority Document
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